



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,758	01/11/2000	Ahmed Tewfik	1064.002US1	6069

21186 7590 08/04/2003

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. BOX 2938  
MINNEAPOLIS, MN 55402

EXAMINER

LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
----------	--------------

2178

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/481,758

Applicant(s)

TEWFIK ET AL.

Examiner

Matthew J. Ludwig

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to communications: application filed on 1/11/00.
2. Claims 1-20 are pending in the case. Claim 1 is an independent claim.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11, 14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al., U.S. Patent Number 6,278,792 filed (4/26/00).

**In reference to independent claim 1**, Cox discloses:

Insertion of a watermark signal into image data and the subsequent extraction of the watermark from watermark image data, which has been subject to distortion between the times of insertion and extraction, involve the insertion of multiple watermarks. See Abstract.

The reference does not explicitly disclose generating a final watermarked content source by utilizing the different watermarked versions; however the reference does disclose the steps of extracting a watermark, using only the terms in a group and determining a new signal selected such that W is similar to V, but is highly correlated with watermark W. See column 8, lines 53-56. The techniques taught by Cox perform a similar method of generating a final watermark. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Cox and included the multiple watermarks for generating a final

Art Unit: 2178

watermark, which would have given the user the added benefit of an enhanced form of copyright protection.

**In reference to dependent claim 2**, Cox discloses:

Decoding of the watermark requires that each 8x8 block be individually analyzed to extract the watermark signal contained therein. The individual extracted signals may then be combined to form a composite watermark. See column 3, lines 25-30.

**In reference to dependent claim 3**, Cox discloses:

Extracting a watermark, using only the terms in a group and determining a new signal selected such that W is similar to V, but is highly correlated with watermark W. See column 8, lines 53-56. The techniques taught by Cox perform a similar method of generating a final watermark.

**In reference to dependent claim 4**, Cox discloses:

An insertion method that hides multiple patterns in the data. These patterns fall into two categories: registration patterns used during detection to compensate for translational shifts, and watermark patterns that encode the information content of the watermark. See column 4, lines 43-50.

**In reference to dependent claim 5 & 6**, Cox discloses:

If each group is watermarked as though it were a separate image, then the watermark from at least one group will generally survive attack, and the watermark that is extracted will consist of the correct watermark, from that group. See column 8, lines 12-18.

**In reference to dependent claim 7**, Cox discloses:

Art Unit: 2178

Insertion of a watermark signal into image data and the subsequent extraction of the watermark from watermark image data, which has been subject to distortion between the times of insertion and extraction, involve the insertion of multiple watermarks. See Abstract.

**In reference to dependent claim 8, Cox discloses:**

Insertion of a watermark signal into image data and the subsequent extraction of the watermark from watermark image data, which has been subject to distortion between the times of insertion and extraction, involve the insertion of multiple watermarks. See Abstract.

**In reference to dependent claim 9, Cox discloses:**

A registration pattern can be inserted by using the watermark insertion method. See column 15, lines 52-55.

**In reference to dependent claim 10, Cox discloses:**

Decoding of the watermark requires that each 8x8 block be individually analyzed to extract the watermark signal contained therein. The individual extracted signals may then be combined to form a composite watermark. See column 3, lines 25-30.

**In reference to dependent claim 11, Cox discloses:**

Insertion of a watermark signal into image data and the subsequent extraction of the watermark from watermark image data, which has been subject to distortion between the times of insertion and extraction, involve the insertion of multiple watermarks. See Abstract.

The reference does not explicitly disclose generating a final watermarked content source by utilizing the different watermarked versions; however the reference does disclose the steps of extracting a watermark, using only the terms in a group and determining a new signal selected such that  $W$  is similar to  $V$ , but is highly correlated with watermark  $W$ . See column 8, lines 53-

Art Unit: 2178

56. The techniques taught by Cox perform a similar method of generating a final watermark.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Cox and included the multiple watermarks for generating a final watermark, which would have given the user the added benefit of an enhanced form of copyright protection.

**In reference to dependent claim 14**, Cox discloses:

Decoding of the watermark requires that each 8x8 block be individually analyzed to extract the watermark signal contained therein. The individual extracted signals may then be combined to form a composite watermark. See column 3, lines 25-30.

In reference to dependent claim 17-20, the claims recite similar limitations to those of claims 1-4, and therefore are rejected under similar rationale.

### ***Claim Objections***

5. Claims 12, 13, 15, and 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iwamura	US Patent No. 6,513,118	filed (1/21/99)
---------	-------------------------	-----------------

Cox et al.	US Patent No. 5,930,369	filed (9/10/97)
------------	-------------------------	-----------------

Haitsma, Jaap 'Audio Watermarking for Monitoring and Copy Protection' Copyright 1/11/00, ACM Multimedia Workshop, pages 119-122.

Art Unit: 2178


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 703-305-8043.

The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ML  
July 21, 2003

  
HEATHER R. HERNDON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100